NEVAmerica
TEST SEQUENCE

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Prepared by

Electric Transportation Applications

Prepared by: _____ Date: _____
Ryan Harkins

Approved by: _____ Date: _____
Donald B. Karner

NEV PERFORMANCE TEST PROCEDURE SEQUENCE

The following test sequence shall be used for conduct of NEVAmerica Baseline Performance Testing. This sequence of testing confirms vehicle conformance with all "shall" statements contained in the NEV America Neighborhood Electric Vehicle (NEV) Technical Specifications. Additionally, submittal of all information required by the NEV America Neighborhood Electric Vehicle (NEV) Technical Specifications is verified and selected "should" statements are verified.

1. ETA-NAC006 Receipt Inspection

Conduct of this test procedure accomplishes the following test objectives.

- Should data submittal verification
- Should data submittal accuracy verification by inspection
- Should data submittal accuracy verification by vehicle measurement
- Testing for selected should requirements not verified by specific Performance Test Procedures (ETA-NTPXXX)

2. ETA-NTP011 Vehicle Verification (Initial Phase)

Conduct of this test procedure is accomplished in two phases. The initial phase accomplishes the following test objectives.

- Shall data submittal verification
- Shall data submittal accuracy verification by inspection
- Testing for shall requirements not verified by specific Performance Test Procedures (ETA-NTPXXX)

3. ETA-NTP004 Electric Vehicle Constant Speed Range Tests

Conduct of this test procedure accomplishes the following test objectives.

- Vehicle range should requirement verification
- Maximum speed shall (FMVSS) requirement verification
- Maximum speed should requirement verification
- Speedometer accuracy should requirement verification
- Odometer accuracy shall requirement verification
- SOC meter accuracy should requirement verification
- Maximum battery discharge shall requirement data collection
- DOD calibrations for subsequent tests

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4. ETA-NTP005 Rough Road Course Test

Conduct of this test procedure accomplishes the following test objectives.

- Rough road completion shall requirement verification
- Rough road impairment should requirement
- Chassis leakage current shall requirement data collection
- Charger leakage current shall requirement data collection
- Charging efficiency data collection

5. ETA-NTP002 Acceleration, Gradeability and Deceleration

Conduct of this test procedure accomplishes the following test objectives.

- Acceleration should requirement verification
- Gradeability should requirement verification

6. ETA-NTP006 Brake Test

Conduct of this test procedure accomplishes the following test objectives.

- Regenerative braking interaction shall requirement verification
- Braking distance data collection

7. ETA-NTP007 Road Course Handling Test

Conduct of this test procedure accomplishes the following test objectives.

- Vehicle handling course time data collection

8. ETA-NTP010 Battery Charger Performance

Conduct of this test procedure accomplishes the following test objectives.

- Maximum battery discharge shall requirement data collection
  (Note; This testing requires a separate battery discharge to verify repeatability of the discharge limiter data collected by ETA-NTP004 using ETA-NTP011)
- Charge time shall requirement verification
- Automatic termination shall requirement verification
- Charger input voltage shall requirement verification
- Charger operating data collection
- Charger ground leakage current data collection
- Charging efficiency data calculation
- Out of service endurance should requirement verification

9. ETA-NTP011 Vehicle Verification (Final Phase)

Conduct of this test procedure accomplishes the following test objectives.

- Verification of maximum DOD limit repeatability (using ETA-NTP004 and ETA-NTP010)
- Repair time shall requirement verification (using Non-Conformance Reports)
- Charger leakage current verification

NEV CONDUCT OF BATTERY CHARGING PROCEDURES

During conduct of testing, the vehicle shall be charged using the following procedures.

A. ETA-NTP008 Battery Charging

- Battery charging activities using onboard or Level II offboard charging

B. ETA-NTP013 Level III Charging

- Battery charging activity using Level III charging